

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (currently amended) Switched-mode power supply ~~having~~ comprising:
a transformer ~~which has~~ with a primary winding and at least one secondary winding,
~~having~~ a switching transistor coupled in series with the primary winding,
an integrated circuit comprising ~~having~~ a driver stage for controlling the switching transistor, and ~~having~~ a control circuit with an oscillator for ~~controlling~~ regulating an output voltage, ~~with the control circuit containing an~~ the oscillator providing a frequency being adjustable which can be adjusted via a connection to which an external capacitor is coupled for adjusting a switching frequency of the driver stage, wherein the connection is further coupled to a the secondary winding for charging the capacitor by means of an oscillation occurring on the secondary winding in order to determine the switch-on time of the switching transistor ~~by means of oscillation which occurs on the second winding~~.
2. (currently amended) Switched-mode power supply according to Claim 1, wherein a switching stage is arranged between the connection and the secondary winding and passes on a supply voltage to the connection when a sudden voltage change occurs on the secondary winding at the time of ~~an~~ the oscillation after a demagnetization phase of the transformer.
3. (currently amended) Switched-mode power supply according to Claim 2, wherein the secondary winding produces a positive voltage pulse, which switches on the switching stage, when ~~an~~ the oscillation occurs.
4. (previously presented) Switched-mode power supply according to Claim 2,

wherein a voltage divider is arranged between the switching stage and the secondary winding in order to set a threshold value for the switching stage.

5. (previously presented) Switched-mode power supply according to Claim 2, wherein a capacitor is arranged between the switching stage and the secondary winding in order to limit a voltage pulse.
6. (currently amended) Switched-mode power supply according to Claim 1 wherein the switching stage is coupled to an output of the driver ~~states~~ stage in order to block the switching stage when the switching transistor is switched on.
7. (currently amended) Switched-mode power supply according to Claim 6, wherein the switching stage is coupled via a resistor and a diode to the output of the driver ~~states~~ stage.
8. (previously presented) Switched-mode power supply according to Claim 4, wherein the switching stage has a first switch, which is connected between the supply voltage and the connection and is switched on by a second switch when the voltage on the secondary winding exceeds the threshold value predetermined by the voltage divider.
9. (previously presented) Switched-mode power supply according to Claim 1, wherein the secondary winding is an auxiliary winding on the primary side of the transformer.
10. (currently amended) Switched-mode power supply according to Claim 1, wherein ~~the control circuit and the oscillator are arranged in an integrated circuit, in that~~ the oscillator is controlled by an external circuit with a sawtooth voltage via the connection, the external circuit comprising a resistor and the capacitor, and ~~in that~~ wherein a logic circuit in the integrated circuit in each case alternately uses a first sawtooth pulse from the sawtooth voltage to limit ~~the~~ a time for which the switching transistor is

switched on and a second sawtooth pulse from the sawtooth voltage in order to determine ~~the~~ a phase in which the switching transistor is switched off.

11. (previously presented) Switched-mode power supply according to Claim 10, wherein the supply voltage is a reference voltage which is produced via an output of the integrated circuit.